State of Wisconsin
Department of Natural Resources

EMISSION UNIT HAZARDOUS AIR POLLUTANT SUMMARY
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-126   11-93   Information attached? _ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:

2. Facility identification number:

3. Stack identification number:

4. Unit identification number:

5. Unit material description:

6. Complete the following summary of hazardous air emissions from this unit. Attach sample calculations and emission factor references. Attached? _____

Pollutant CAS	Actual emissions		Maximum theoretical emissions		Potential to emit	
		Units		Units		
						TPY
						TPY
						TPY
						TPY
						TPY
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						TPY

State of Wisconsin
Department of Natural Resources

FACILITY HAZARDOUS AIR POLLUTANT SUMMARY
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-127 11-93

Information attached? _ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:

2. Facility identification number:

3. Complete the following emissions summary for all hazardous air emissions at this facility (as defined in ch. NR 445, Wis Adm. Code, and sec. 112, 1990 Clean Air Act Amendments):

Pollutant CAS	Actual emissions		Maximum theoretical emissions		Potential to emit	
		Units		Units		
						TPY
						TPY
						TPY
						TPY
						TPY
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						TPY

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Department of Natural Resources

EMISSION UNIT SUMMARY
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-128 11-93 Information attached? _ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:	2. Facility identification number:
3. Stack identification number:	4. Unit identification number:

5. Complete the following emissions summary for the following pollutants. Attach sample calculations and emission factor references. Attached? ____

Air pollutant	Actual			Maximum theoretical emissions			Potential to emit		Maximum allowable		
		U	TPY		U	TPY				U	TPY
Particulates								TPY			
Sulfur dioxide								TPY			
Organic compounds								TPY			
Carbon monoxide								TPY			
Lead								TPY			
Nitrogen oxides								TPY			
Total reduced sulfur								TPY			
Mercury								TPY			
Asbestos								TPY			
Beryllium								TPY			
Vinyl chloride								TPY			
								TPY			
								TPY			
								TPY			
								TPY			
								TPY			

Units (U) should be entered as follows:

1 = lb/hr
2 = lb/mmBTU
3 = grains/dscf
4 = lb/ gallon
5 = ppmdv
6 = other (specify) _____
7 = other (specify) _____
8 = other (specify) _____

State of Wisconsin
Department of Natural Resources

FACILITY EMISSIONS SUMMARY
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-129 11-93 Information attached? _ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:	2. Facility identification number:

3. Complete the following emissions summary for the listed emissions at this facility.

Air pollutant	Actual	Maximum theoretical emissions	Potential to emit	Maximum allowable
	TPY	TPY	TPY	TPY
Particulates				
Sulfur dioxide				
Organic compounds				
Carbon monoxide				
Lead				
Nitrogen oxides				
Total reduced sulfur				
Mercury				
Asbestos				
Beryllium				
Vinyl chloride				

EMISSION UNIT HAZARDOUS AIR POLLUTANT SUMMARY -- Form 4530-126
AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

NOTE: Use of this form is required by the Department for any air pollution control permit application filed pursuant to ss. 285.61, 285.62 or 285.66, Wis. Stats. Completion of this form is mandatory. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any other purpose.

Use one form for each of up to ten materials that release hazardous air emissions from the source. Facilities using ten or more materials that release hazardous air contaminants may use this form to summarize the hazardous air emissions from the unit, as described below. Materials include fuels, inks, coatings, solvents, additives, cleaning solvents, process raw materials and weld rods. Hazardous air contaminants are defined under chapter NR 445, Wis. Adm. Code, and sec. 112, 1990 Clean Air Act Amendments (42 U.S.C. 7412).

Each emissions unit at the facility will have a group of forms 4530-126 (one for each of a small number of materials involved) or a single Form 4530-126 which summarizes the information requested under item 6 of this form for large numbers of materials involved, for that emissions unit. Documentation of all emissions from all materials must be attached to this form for verification purposes. Examples of this reporting are included in the instruction booklet.

Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports.

Item 3 Provide the identification number of the stack that exhausts this equipment. Use the same number used on form 4530-103.

Item 4 Provide the source identification number. The source number should be consistent with Form 4530-104, -105, -106, -107, -108, or -109 as appropriate.

Item 5 Identify each material that is associated with the source identified in item 4 which emits hazardous air pollution (for example, a boiler which fires coal, natural gas, or co-fires coal and gas should list three materials: coal, gas, and coal/gas). Facilities using more than 10 materials that release hazardous air contaminants may submit the required information in tabular format for each source. Describe the source(s) of information about the material (e.g., Material Safety Data Sheet). Form 4530-135 may be used for this purpose.

Item 6 List all hazardous air pollutants released from this material. Use the CAS (Chemical Abstract System) number for each pollutant. If no CAS number has been assigned to a pollutant, write the name of the pollutant.

Estimate the actual emissions and maximum theoretical emissions for each hazardous air contaminant released from this material at this source. For each pollutant, use the same units found on Form 4530-132 to describe the threshold value (i.e., pounds per hour or pounds per year, depending on the hazardous air pollutant). Also estimate the potential to emit, in tons per year, for each hazardous air contaminant released from this material at this source. If you are claiming an exemption or other compliance demonstration, cite the appropriate regulation. **Attach your calculations and an explanation of any exemptions you claim.** For volatile pollutants, you may want to use Equation G (see below) as a guide.

Estimate each hazardous air contaminant's potential to emit (in tons per year) and **attach your calculations.** You may want to use the equations shown below as a guide. Indicate the units (i.e., TPY). These annual emissions are those "emitted" after pollution control equipment. For outdoor emissions (e.g. burn pits, storage tanks) that do not have pollution control equipment, use a "release efficiency" of 100% for the "capture efficiency". Indoor emissions that do not have pollution control equipment and are not directly vented outside (i.e. fugitive indoor emissions) would report an amount generated and no stack emissions. Form 4530-135 may be used to report these fugitive emissions.

EQUATIONS FOR USE WITH **FORM 4530-126, ITEM 6**

Equation A: Emissions after controls (potential to emit)

$$\text{amount of pollutant emitted (after controls)} = \text{amount generated (before)} \times \frac{\text{capture efficiency}}{100\%} \times \left(1 - \frac{\text{removal eff.}}{100\%}\right)$$

Equation B: Emissions from fuel combustion (based on stack test data)

$$\text{amount generated (before, lb/hr)} = \text{emissions based on stack test data} \times \frac{\text{maximum heat input (BTU/hr)}}{\text{heat input during test (BTU/hr)}}$$

Equation C: Emissions from fuel combustion (based on emission factors)

$$\text{amount generated (before)} = \text{emission factor} \times \text{maximum heat input (or fuel use rate)}$$

Equation D: Emissions from coating activities (for volatile pollutants)

$$\text{amount generated (before)} = \text{maximum coating use rate (lbs/hr)} \times \frac{\text{pollutant/coating (\% by weight)}}{100\%}$$

Equation E: Emissions from coating activities (for particulates)

$$\text{amount generated (before)} = \text{maximum coating use rate (lbs/hr)} \times \frac{\text{pollutant/coating (\% by weight)}}{100\%} \times \left(1 - \frac{\text{efficiency}}{100\%}\right) \times \text{transfer}$$

Equation F: General emissions equation

$$\text{amount generated (before)} = \text{maximum process capacity} \times \text{emission factor}$$

Equation G: Potential to Emit (for volatile pollutants)

$$\text{maximum emissions (annual)} = \text{maximum material use (tons/yr)} \times \frac{\text{pollutant/material (\% by weight)}}{100\%} \times \frac{\text{capture efficiency}}{100\%} \times \left(1 - \frac{\text{removal eff.}}{100\%}\right)$$

FACILITY HAZARDOUS AIR POLLUTANT SUMMARY -- Form 4530-127
AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

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Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports.

Item 3 Provide an emissions summary for all hazardous air emission sources at this facility:

- Indicate the hazardous air contaminant's corresponding Chemical Abstract System (CAS) number.
- Determine the total emissions at maximum capacity from all sources. These emissions should be the controlled emissions. Use the same units (i.e., pounds per hour, pounds per year, tons per year, etc.) for the hazardous air contaminants as used for the standard in chapter NR 445, Wis. Adm. Code, or section 112 of the 1990 Clean Air Act Amendments (42 U.S.C. 7412).

EMISSION UNIT SUMMARY -- Form 4530-128
AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

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Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports.

Item 3 Provide the identification number of the stack that exhausts this equipment. Use the same number used on form 4530-103.

Item 4 Provide the identification number from the appropriate form(s) 4530-104, -105, -106, -107, -108, or -109 completed for the emissions unit that will have its emissions summarized on this form.

Item 5 Provide the emission levels for each listed pollutant emitted from this source. The emissions should be presented using the same units as the applicable limits shown on Form 4530-130 and in tons per year (TPY). The list of footnotes found in the lower left corner of this form allows the applicant to specify the units of each reported emission level. To specify the appropriate units, write the appropriate footnote number in the columns headed by the letter "U".

For example: to indicate an emission rate of 3.2 lbs SO_2/MMBTU, write

Sulfur dioxide	3.2	2

on the line for sulfur dioxide (SO_2).

Maximum theoretical emissions should represent emissions at full production capacity of the source before reduction by any pollution control equipment. This is normally 24 hours/day for 365 days/year or 8760 hours/year, although this calculation may account for certain operational constraints such as press down time or scheduled boiler maintenance outage. Please see subsection NR 400.02(53m) for the precise definition of "maximum theoretical emissions." You may want to use emission factors to determine these emissions.

Potential to emit should represent emissions at full production capacity of the source after reduction by any air pollution control equipment. This is normally 24 hours/day for 365 days/year (i.e., 8760 hours/year), although physical or operational limitations that are enforceable by the Administrator of EPA on the capacity of a source to emit air contaminants may be considered in determining potential to emit. Please see subsection NR 400.02(71) for the precise definition of "potential to emit." You may want to use emission factors to determine these emissions.

Maximum allowable emissions should represent the greatest amount of emissions allowed under any permit or applicable standards, taking into consideration the equipment limitations, such as line speed, and pollution control efficiencies of the equipment.

Please remember to:

- Report hazardous air pollutants on Forms 4530-126 and 4530-127.
- State the reference(s) for the calculations. Emission factors may be compiled in published documents, such as EPA's AP-42, or may be based on stack test results. A separate page of numbered references is appropriate and may be attached to form 4530-128. Form 4530-135 may be used for this purpose.

FACILITY EMISSIONS SUMMARY -- Form 4530-129

AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

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Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports.

Item 3 Provide the emission levels in tons per year (TPY). For each pollutant emitted from the facility, sum the annual actual, maximum theoretical, potential to emit, and maximum allowable emission rates (tons per year only) reported for all of the facility's emission units (i.e., on Forms 4530-128). The totals for each pollutant should be reported on Form 4530-129 in tons per year (TPY).

***** Hazardous air pollutant emissions should be reported on Forms 4530-126 and 4530-127. *****